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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/690,457	10/19/2000	William Hsiao-Yu Ku	AUS9-2000-0370-US1	7542
35525	7590	09/29/2004	EXAMINER	
IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380			VO, LILIAN	
			ART UNIT	PAPER NUMBER
			2127	

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/690,457

Applicant(s)

KU ET AL.

Examiner

Lilian Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1, 6, 7, 9, 10, 15 - 17 and 22 - 32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6, 7, 9, 10, 15 - 17 and 22 - 32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1, 6, 7, 9, 10, 15 – 17 and 22 – 32 are pending. Claims 2 – 5, 8, 11 – 14, and 18 – 21 have been cancelled.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 6, 10, 15, 17, 22, 24, 26, 27, 29, 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forbes et al. (US Pat. Application Publication 2002/0144248, hereinafter Forbes).

4. Regarding **claims 1, 10 and 17**, Forbes teaches a method for correcting a path sequence of an environment variable in a data processing system, the path sequence specifying an order for searching directories for locating executable code within the data processing system, the method comprising:

monitoring the data processing system for a change effecting the path sequence of the environment variable, wherein the environment variable is enabled and being used by the data processing system to specify the order for searching the directories within the data processing system (page 5, paragraphs 57 – 64: during the installation process, the software package

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manager running in the computer acquires the manifest files for checking the name and version of the software package to be installed and if the software requires the installation of other software components, create necessary directories for storing other software components. Page 5, paragraph 65 - page 6, paragraph 69: during the update process, software package manager scans the code store data structure to determine to compare the newly stored component with previously stored component version and take the appropriate action. See also fig. 3A and 3B); and

responsive to detection of the change effecting the path sequence of the environment variable, determining whether any duplicate files exist in the any of the directories identified by the path sequence (page 5, paragraph 57 - 62: install any other software components (dependencies) as needed during the installation process. Page 5, paragraph 65 - page 6, paragraph 68: remove any duplicate and/or component with version that are not needed during the update process).

As for the step of altering the path sequence of the environment variable to ensure that a proper file is found and used when selected by one of a user and a running application program in responsive to determining that duplicate files do exist, Forbes discloses that any duplicate or not needed version components are removed from the directories and updates the corresponding entry to point to the other component (page 6, paragraphs 66 - 69) and when user request for the execution of the software package, the run-time environment execute the software by locating the necessary components from different directories (page 6, paragraph 73 and fig. 3C).

It would have been obvious for one of an ordinary skill in the art, at the time the invention was made, to recognize the step of altering/changing the execution environment/path

has been considered as appropriate in order for Forbes' system function correctly with proper files selected during the run after undesired components have been removed.

5. **Claims 6, 15, and 22** are rejected on the same ground as stated in claims 1, 10 and 17 above.

6. Regarding **claim 24**, Forbes discloses a method for managing environment variables in a data processing system, comprising data processing system implemented steps of:

automatically invoking an environment variable manager upon occurrence of at least one of the occurring events: a) a directory is deleted (page 5, paragraph 65 – page 6, paragraph 69: every directory that has duplicate components/file or incorrect version is removed during the update process and new information is updated by pointing to the appropriate files. Fig. 3B); b) a product is uninstalled on the data processing system (page 6, paragraph 74 – 77: when user wants to uninstall a software package, a standard uninstall routine provided by the runtime environment invokes package manager to update the code store data structure accordingly. Fig. 3D); and c) a given environment variable is manually modified by a user (figs. 3A – 3C);

determining, by the environment variable manager, if any occurring event a), b) or c) causes a modification to an affected path sequence of any presently active environment variable, the path sequence specifying an order for searching directories for locating executable code within the data processing system (page 5, paragraph 56 – page 6, paragraph 77 and fig. 3A – 3C: during the updating and uninstallation process, package manager detects all the change/modification in the operating environment and take the appropriate action).

As for the step of automatically correcting the affected path sequence if it is determined that the occurring event causes the modification, Forbes discloses that any duplicate or not needed version components are removed from the directories and updates the corresponding entry to point to the other component (page 6, paragraphs 66 – 69) and when user request for the execution of the software package, the run-time environment execute the software by locating the necessary components from different directories (page 6, paragraph 73 and fig. 3C).

It would have been obvious for one of an ordinary skill in the art, at the time the invention was made, to recognize the step of automatically correcting/changing the execution environment/path has been considered as appropriate in order for Forbes' system function correctly with proper files selected during the run after undesired components have been removed.

7. **Claims 26, 27, 29, 30 and 32** are rejected on the same ground as stated in claim 24 above.

8. Claims 7, 9, 16, 23, 25, 28 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forbes et al. (US Pat. Application Publication 2002/0144248, hereinafter Forbes) as applied to claim 1 above, in view of Hove et al. (US 6,564,369, hereinafter Hove).

9. Regarding **claim 7**, Forbes did not disclose that the selection of one duplicate file is by the user. Nevertheless, this limitation is taught by Hove, in which a conflict checking system

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detects duplicate files and allows the user to move or remove the duplicate files to prevent future problems (abstract, col. 2, lines 1 – 6, 41 – 54, col. 7, lines 1 – 39, figs. 5 and 6).

It would have been obvious for one of an ordinary skill in the art, at the time the invention was made to incorporate the teachings of Hove Forbes to provide a manual option to allow the user to perform such operation during software installation or upgrade.

10. **Claim 16 and 23** are rejected on the same ground as stated in claim 7 above.

11. Regarding **claim 9**, Forbes teaches a method for correcting modifications that have made to an environment variable during installation of software in a data processing system, the method comprising:

installing the software on the data processing system for subsequent execution by the data processing system (abstract and fig. 3A);

detecting that an environment variable has been modified during the installing step (page 5, paragraphs 57 – 64: during the installation process, the software package manager running in the computer acquires the manifest files for checking the name and version of the software package to be installed and if the software requires the installation of other software components, create necessary directories for storing other software components. Fig. 3a).

Forbes discloses of detecting and removing the duplicate or incorrect version files and referencing the appropriate file automatically in the operating environment during the update process (fig. 3B). It is well know in the art that duplicate files can be detected while installing an updated version of any program during the update process as disclosed by Forbes.

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Forbes however did not clearly disclose the step of prompting the user to select the correct one of the duplicate file. Nevertheless, this limitation is taught by Hove, in which a conflict checking system detects duplicate files and allows the user to move or remove the duplicate files to prevent future problems (abstract, col. 2, lines 1 -6, 41 - 54, col. 7, lines 1 - 39, figs. 5 and 6). It would have been obvious for one of an ordinary skill in the art, at the time the invention was made to incorporate the teachings of Hove Forbes to provide a manual option to allow the user to perform such operation during software installation or upgrade.

12. **Claims 25, 28 and 31** are rejected on the same ground as stated in claim 9 above.

#### ***Response to Arguments***

13. Applicant's arguments with respect to claims 1, 9, 10, 17 and 24 - 32 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period



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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is 571-272-3774. The examiner can normally be reached on Monday - Thursday, 7:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lilian Vo  
Examiner  
Art Unit 2127

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September 24, 2004

  
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